

**IN THE CLAIMS:**

Please amend claims 3-10, 13-16, 18-23, 25, and 26 as follows.

1. (Original) A receiver for use in a communications system, said receiver comprising:

a plurality of receiving means, at least two of said receiving means arranged to process the same signal received at different times;

means for combining the output of at least two of said receiving means with different weights, said weights being arranged to take into account information relating to a spreading code of at least one signal other than said same signal.

2. (Original) A receiver as claimed in claim 1, where in said information comprises one of: parts of codes used by said users, codes used by said users or information identifying codes used by said users, or number of active codes.

3. (Currently Amended) A receiver as claimed in claim 1 ~~or 2~~, wherein said information is provided in a reference part of a signal.

4. (Currently Amended) A receiver as claimed in claim 1 ~~,2 or 3~~, wherein the information is provided by said same signal.

5. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said information further comprises information on a channel between said a transmitter transmitting said same signal and the receiver.

6. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said information on the channel comprises channel impulse response information.

7. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said information further comprises channel information for at least one other signal.

8. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said information further comprises information on a pulse shaping filter of the spreading code information.

9. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said information further comprises transmitted power information.

10. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein the receiving means are arranged to process a symbol.

11. (Original) A receiver as claimed in claim 10, wherein the value of a preceding or succeeding symbol is estimated.

12. (Original) A receiver as claimed in 11, wherein the number of possible values of the preceding or succeeding symbol is dependent on a modulation method applied to said symbol.

13. (Currently Amended) A receiver as claimed in ~~any preceding claim 1~~, wherein a first estimate is determined if the value of the succeeding or preceding part of the signal is the same as the current part of the signal and a second estimate is determined if the value of the succeeding or preceding part of the signal is different from the current part of the signal.

14. (Currently Amended) A receiver as claimed in ~~claimed in any preceding claim 1~~, wherein intersymbol interference is estimated using the following equation:

$$R_{ISI}(d_1, d_2) = 2E_c^0 \sum_{l=0}^{L-1} \sum_{q=0}^{L-1} g_l^0 g_q^0 \sum_j \sum_{m=1-N^k}^{N^k-1} \sum_{v=1-N^k}^{N^k-1} R_p(d_1 - jN^kT_c - \tau_l^0 + mT_c) \times \\ R_p(d_2 - jN^kT_c - \tau_q^0 + vT_c) E\{C_{0,j}(m)C_{0,j}(v)\}$$

where

$R_{ISI}$  is the time averaged value of the Inter symbol interference between time instants  $d_1$  and  $d_2$ ,  $E_c^0$  is the value of the power of a single chip,  $g_w$  is the channel impulse function at time  $w$ ,  $R_p(q)$  is the auto-correlation of the chip pulse at time instant  $q$ , and  $E\{C_{0,j}(m)C_{0,j}(v)\}$  is estimated value of the aperiodic auto correlation function of the spreading sequence for symbol  $j$ .

15. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein multiuser interference is determined in accordance with the following equations:

$$R_{MUI}(d_1, d_2) = \sum_{k=1}^{N_u-1} 2E_c^k \sum_{l=0}^{L-1} \sum_{q=0}^{L-1} g_l^k g_q^k \sum_j \sum_{m=1-N^k}^{N^k-1} \sum_{v=1-N^k}^{N^k-1} R_p(d_1 - jN^kT_c - \tau_l^k + mT_c) \times \\ R_p(d_2 - jN^kT_c - \tau_q^k + vT_c) E\{C_{k,j}(m)C_{k,j}(v)\}$$

where

$R_{MUI}$  is the time averaged value of the multi-user interference between time instants  $d_1$  and  $d_2$ ,  $E_c^k$  is the value of the power of a single chip for user  $k$ ,  $g^kw$  is the channel impulse function at time  $w$  for user  $k$ ,  $R_p(q)$  is the auto-correlation of a chip pulse at time instant  $q$ , and  $E\{C_{k,j}(m)C_{k,j}(v)\}$  is an estimated value of an aperiodic auto correlation function of a spreading sequence for symbol  $j$  and user  $k$ .

16. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said signals received by said receiver comprise wanted signals and unwanted signals.

17. (Original) A receiver as claimed in claim 16, wherein said wanted and at least one of said unwanted signals are at the same frequency.

18. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said signals are code division multiple access signals.

19. (Currently Amended) A receiver as claimed in ~~any preceding~~ claim 1, wherein said receiver comprises a RAKE receiver.

20. (Currently Amended) A receiver as claimed in ~~any preceding claim 1~~, wherein said receiving means comprise fingers.

21. (Currently Amended) A receiver as claimed in ~~any preceding claim 1~~, wherein said signals are time division duplexing signals.

22. (Currently Amended) A receiver as claimed in ~~any preceding claim 1~~, wherein said spreading codes comprising cyclically repeated codes.

23. (Currently Amended) A receiver as claimed in ~~any preceding claim 1~~, wherein said codes are cyclically repeated after a maximum of 75 symbols.

24. (Original) A receiver as claimed in claim 23, wherein said codes are cyclically repeated after 16 symbols.

25. (Currently Amended) A receiver as claimed in ~~any preceding claim 1~~, wherein said information comprises scrambling code information or channelization code.

26. (Currently Amended) A receiver as claimed in ~~any preceding claim 1~~, wherein means are provided for calculating an average correlation between a code of interest and n possible interfering codes.

27. (Original) A receiver as claimed in claim 26, wherein said average correlation is used to determine said weights.

28. (Previously Presented) A receiver for use in a communications system, said receiver having a plurality of receiving means, at least two of said receiving means arranged to process the same signal received at different times;

means for calculating the average correlation between a code of interest and n possible interfering codes

means for combining the output of at least two of said receiving means with different weights, said weights being arranged to take into account said average correlation.

29. (Previously Presented) A receiving method for use in a communications system, said method comprising:

receiving with different receiving means the same signal received at different times;

determining weights for outputs of said receiving means, said weights being arranged to take into account information relating to a spreading code of at least one signal other than said same signal; and

combining the output of at least two of said receiving means with said weights.

30. (Original) A receiving method for use in a communications system, said method comprising the steps of:

calculating an average correlation between a code of interest and n possible interfering codes; and

using said average correlation when determining weights for signal combination.